

## Recombinant Human IL-12

Catalog No: C158

<b>Description</b>	Recombinant Human Interleukin-12 is produced by our Mammalian expression system and the target gene encoding Arg23-Ser219&Ile23-Ser328 is expressed.
<b>Source</b>	Human Cells
<b>Alternative name</b>	Interleukin-12 subunit alpha;IL-12A;Cytotoxic lymphocyte maturation factor 35 kDa subunit;CLMF p35;IL-12 subunit p35;NK cell;IL12A ;NKSF1 stimulatory factor chain 1;
<b>Accession No.</b>	P29459&P29460
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Quality Control</b>	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Amino Acid Sequence</b>	<p>RNLPVATPDPGMFPCLLHHSQNLLRAVSNNMLQKARQTLEFYPTCTSEEIDHEDITKDKTSTVEACLPLELTK  NESCLNSRETSFITNGSCLASRKTSFMMALCLSSIEDLKMYQVEFKTMNAKLLMDPKRQIFLDQNMLA  VIDELMQALNFNSETVPQKSSLEEDFYKTKIKLCILLHAFRIRAVTIDRVMSYLNAS&amp;IWELKKDVYVVEL  DWYPDAPGEMVVLTCDTPEEDGITWTLQSSSEVLGSGKTLTIQVKEFGDAGQYTCHKGGEVLSHSLLL  LHKKEDGIWSTDILKDQKEPKNKTFLRCEAKNYSGRFTCWWLTTISTDLTFSVKSSRGSSDPQGVTCGA  ATLSAERVVRGDNKEYEYSVEQCQEDSACPAAEESLPIEVMDAVHKLKYENYTSSFFIRDIIKPDPPKNLQ  LKPLKNSRQVEVSWEYPDTWSTPHSYFSLTFCVQVQGKSKREKKDRVFTDKTSATVICRKNASISVRA  QDRYYSSSWSEWASVPCS</p> <p>IL-12 is a heterodimeric pleiotropic cytokine made up of a 40 kDa (p40) subunit and a 35 kDa (p35) subunit. Human and mouse IL-12 share 70% and 60% amino acid sequence identity in their p40 and p35 subunits, respectively. IL-12 is involved in the differentiation of naive T cells into Th1 cells. It is known as a T cell-stimulating factor, which can stimulate the growth and function of T cells. It stimulates the production of interferon-gamma (IFN-γ) and tumor necrosis factor-alpha (TNF-α) from T cells and natural killer (NK) cells, and reduces IL-4 mediated suppression of IFN-γ. T cells that produce IL-12 have a coreceptor, CD30, which is associated with IL-12 activity. IL-12 plays an important role in the activities of natural killer cells and T lymphocytes. IL-12 mediates enhancement of the cytotoxic activity of NK cells and CD8+ cytotoxic T lymphocytes.</p>
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